Dimensions of PTSD Among Older Veterans Seeking Outpatient Medical Care: A Pilot Study¹

Cheryl S. Hankin, 23 Francis R. Abueg, 23 Dolores Gallagher-Thompson, 4,5 and Ami Laws⁵

We examined posttraumatic stress disorder (PTSD) arising from a variety of stressors among a sample (n = 30) of male veterans 60 years of age or older seeking outpatient medical treatment. Thirty percent of this nonpsychiatric sample satisfied criteria for lifetime PTSD. We compared PTSD and nonPTSD groups along the following dimensions: health care utilization, somatic complaints, alexithymia, and developmental timing of trauma occurrence. We found no significant differences between groups for demographics, military history, health care utilization, or alexithymia. The PTSD-positive group reported significantly more chest pain, arthritis, and greater frequency and distress from trauma occurring in adolescence.

KEY **WORDS:** PTSD: older veterans; outpatient medical care.

INTRODUCTION

Posttraumatic stress disorder (PTSD; American Psychiatric Association, 1994) among older veterans has recently received the attention of empirical researchers (Spiro, Schnurr, and Aldwin, 1994; Aldwin, Levenson, and Spiro, 1994). Evidence suggests that PTSD is a chronic disorder, with symptoms waxing and waning throughout the life course (Weiss, Mannar, Schlenger, Fairbank, Jordan, Hough, and Kulka, 1992; Op den Velde, Falger, Hovens, de Groen, Lassahuit, VanDuijn, and Schouten, 1993; Kluznik, Speed, van Valkenberg, and Magraw, 1986).

Researchers speculate that PTSD remains underdetected among older adults (Blake, Cook, and Keane, 1992; Blake, Keane, Wine, Mora, Taylor, and Lyons, 1990;

Medical Center, Palo Alto, California.

Pacific Graduate School of Psychology, Palo Alto, California.

Older Adult and Family Center, Palo Alto DVA Medical Center, Palo Alto, California 94304.

Stanford University School of Medicine, Stanford, California.

¹Portions of this research were presented at the Annual Meeting of the American Psychological Association in August 1994 in Los Angeles, California, and at the annual meeting of the International Society for Traumatic Stress Studies in November 1994 in Chicago, Illinois. rational Center for Posttraumatic Stress Disorder and Older Adult and Family Center, Palo Alto DVA

Lipton and Schaffer, 1988; Lipton and Schaffer, 1986; Nichols and Czirr, 1986). Factors offered as explanation for underdetection of PTSD among older adults include the following: (1) there is reluctance among this cohort to discuss symptoms of PTSD-related psychological distress (Lipton and Schaffer, 1988; Nichols and Czirr, 1986); and (2) there is a general tendency for older adults to present with somatic symptoms in lieu of psychological complaints (Shapiro, Skinner, Kessler, Von Korff, German, Tischler, Leaf, Benham, Cottler, and Regier, 1984; Ruegg, Zisook, and Swerdlow, 1988; Miller, Goreczny, and Perconte, 1992). Consequently, older adults with PTSD-related distress may more likely seek treatment from medical rather than psychiatric services.

One oversight in current research with older veterans, however, is the sole focus upon PTSD arising from combat-related traumatic events, rather than from a range of events occurring throughout the lifespan. Indeed, PTSD among veterans may arise from a variety of stressors other than combat. The veteran may have experienced trauma in childhood or adolescence, such as sexual or physical abuse; trauma in early adulthood, such as criminal victimization; trauma in middle adulthood, such as natural disaster; or trauma in late adulthood, such as life-threatening illness. Any single traumatic event or combination of traumatic events occurring over the lifespan may precipitate the onset of PTSD. Exacerbation of symptoms may arise in response to anniversary reactions, milestone events across the life cycle, and subsequently occurring traumatic events (Archibald and Tuddenham, 1965; Christenson, Walker, Ross, and Maltbie, 1981; Elder and Clipp, 1988; Op den Velde, Falger, de Groen, van Duijn, Hovens, Meizer, Soons, and Schouten, 1990; Richmond and Beck, 1986; Scaturo and Hayman, 1992; Van Dyke, Zilberg, and McKinnon, 1985).

The present investigation was conducted as part of a pilot study of PTSD among older male veterans. The aims of the present study were to: (1) identify older, outpatient, medical help-seeking veterans with PTSD arising from a variety of stressors across the lifespan; and (2) assess differences between PTSD and nonPTSD older veteran groups along medical, psychological, and interpersonal dimensions. We report preliminary findings based upon the following initial hypotheses:

1. When compared with the nonPTSD group, somatic complaints and health care utilization among older male veterans will be greater in the PTSD group than the nonPTSD group.

Individuals with PTSD more frequently report poorer health, chronic pain, cognitive impairment, sleep disturbance, sexual dysfunction, and adverse health practices than do nonPTSD controls (Glaubman, Mikulincer, Porat, Wasserman, and Birger, 1989; Everly and Horton, 1989; Sutker, Winstead, Galena, and Allain, 1991; Benedikt and Kolb, 1986; White and Faustman, 1989; Hearst, Newman, and Hulley, 1986; Shalev, Bleich, and Ursano, 1990). Additionally, Kulka, Schlenger, Fairbank, Hough, Jordan; Marmar, and Weiss (1990) found that male Vietnam War (VN) veterans with PTSD utilized Veterans Administration medical health services approximately 2.5 times more frequently than did nonPTSD-diagnosed male VN veterans. While the majority of research in this area has been conducted on Vietnam War (VN) veteran samples, we hypothesized that frequency of somatic complaints and increased health care utilization would extend to older veterans with PTSD as well.

2. The PTSD group will **score** higher than the **nonPTSD** group on a well-established measure of alexithymia.

The term alexithymia describes individuals with diminished ability to recognize and verbalize their emotional state. As a result of such diminished ability, the alexithymic individual may express distress somatically (Keltikangas-Jarvinen, 1987; Lesser, 1981). Hyer, Woods, Summers, Boudewyns, and Harrison (1990) found a significant relationship between PTSD-diagnosed VN veterans and alexithymia as measured by a subscale of the MMPI. Kosten, Krystal, Giller, Frank, and Dan (1992) found that Vietnam combat veterans with PTSD who scored higher on a measure of alexithymia showed poorer response to PTSD treatment. Pasini, della Chiaie, Seripa, and Ceani (1992) suggest an association between increased age and alexithymia, such that older individuals are more likely to have alexithymic tendencies than younger individuals.

3. There is a developmental timing effect for PTSD **such** that self-reported frequency and distress of traumatic events in both *childhood* and *adolescence* will be greater in the PTSD group than in the nonPTSD group. We further hypothesized that there will be no differences in reported frequency and distress of *adult* traumatic events between either group.

Posttraumatic stress disorder among veterans may arise from stressors occurring in childhood or adolescence, from combat-related events, or from post-service experiences. Moreover, multiple traumatic events occurring throughout the lifespan may precipitate PTSD onset or exacerbate symptoms. Researchers have noted a significant association between childhood exposure to stressful experiences and subsequent adult onset of PTSD (Bremner, Southwick, Johnson, Yehuda, and Charney, 1993; Emery, Emery, Shama, Quiana, and Jassani, 1990; Zaidi and Foy, 1994). Such childhood stressors may include sexual and physical abuse, parental loss, and parental alcoholism. While this body of research has focused upon a younger VN veteran cohort, we predicted these results would be replicated in our older sample.

METHOD

Participants

The subjects were 30 male veterans 60 years of age or older, who were seeking medical treatment at a VA outpatient general medical clinic. Average age of participants was 68.5 **years**, with a range of 61 to 78 years; mean education was 13 years (±2.6 years); average annual income was \$15,000 (±\$5,000). The majority of participants was married.

Materials and Procedures

Subjects completed demographic, military history, and self-reports of health status. Cognitive impairment was assessed with a Mini Mental State Examination (Folstein, Folstein, and **McHugh**, 1975). Lifetime exposure to a variety of stressful

events was investigated by interview with a Lifetime Trauma Query (LTQ; Drescher and Abueg, 1992). The LTQ is divided into three sections, which permit a chronological assessment of the type, intensity, and frequency of trauma occurring in childhood, adolescence, and adulthood. The Clinician-AdministeredFTSD Scale (CAPS; Blake, Weather, Nagy, Kaloupek, Klauminzer, Charney, and Keane, 1990) was used as the gold standard diagnosis for PTSD. The CAPS is a structured interview designed to assess DSM-III-R (and DSM-IV) criteria for current and lifetime FTSD. An important advantage of this instrument over other structured clinical interviews for PTSD is its ability to both dichotomously evaluate DSM criteria as well as evaluate the intensity and frequency of symptoms in the form of a continuous score.

Participants completed the following self-report questionnaires: Revised Mississippi Scale for Combat Veterans (Keane, Caddell, and Taylor, 1988), MMPI-2 PK and PS subscales (Butcher, Dahlstrom, Graham, Tellegen, and Kaemmer, 1989; Keane, Malloy, and Fairbank, 1984; Schlenger and Kulka 1989), Penn Inventory for Posttraumatic Stress Disorder (Hammarberg, 1992), Beck Depression Inventory (Beck, Rush, Shaw, and Emery, 1979), Symptom Checklist-90-Revised (Derogatis, 1977), Dissociative Experiences Scale (Bernstein and Putnam, 1986), Toronto Alexithymia Scale (Taylor, Ryan, and Bagby, 1985), and subscales of the Family Environment Scale (Moos, 1975). In addition, number of visits to VA local outpatient clinics and number of days inpatient at the VA hospital for a 2-year period ending July 1, 1994, was compiled from VA hospital computerized records.

RESULTS

Fourteen participants in our sample reported no trauma-related distress at any time in their lives as measured by the CAPS. Seven participants reported mild distress during their lifetime due to trauma as measured by the CAPS. When a clinical cut-off score of 65 was applied to our sample (Weathers and Litz, 1994), seven participants were classified as having a lifetime diagnosis of PTSD. Two participants scored 64 on the CAPS; we chose to include these two cases in our PTSD-positive group. Thus, nine participants (30% of our sample) were classified as having a lifetime diagnosis of PTSD.

We found no differences between PTSD and nonPTSD groups for demographic variables, combat era or theater of military service, active military combat experience, military service-related injury, types of trauma experienced, or cognitive status.

As shown in "fable I, a multivariate analysis of variance revealed no differences between groups on frequency or types of somatic complaints, health care utilization, or alexithymia scores. However, univariate analysis indicated that chest pain and arthritis were reported at a significantly greater frequency in the PTSD group.

As shown in **Table II**, the FTSD group reported a history of more frequent and distressing traumatic events occurring in adolescence than did the **nonPTSD** group. However, no differences were found between groups for history of traumatic events occurring in childhood or adulthood. Thus, the PTSD group of older veterans was distinguished by the increased frequency and level of distress arising from a history of traumatic events occurring only during adolescence.

Source of variation	Multivariate F-ratio	Univariate F-ratio ^a	P <
Somatic complaints	1.1		
Chest pain		4.3	0.05
Headache		2.9	0.10
Heart disease		0.3	0.60
Stroke		2.6	0.10
Arthritis		0.7	0.04
Health care utilization	0.4		
Inpatient		0.0	1.00
Outpatient		1.0	0.30
Alexithymia	0.70		
TAS		0.2	0.70

"fable I. Summary of Somatic Complaints, Health Care Utilization, Alexithymia: Multi- and Univariate Analysis of Variance

DISCUSSION

Thirty percent of our nonpsychiatric help-seeking older veteran sample satisfied clinical cut-off for a diagnosis of PTSD. A multivariate analysis of variance revealed no significant differences between older male veteran groups with PTSD and without PTSD on measures of health care utilization or alexithymia. Results from univariate analysis of somatic complaints indicate that the PTSD-positive group reported significantly greater occurrences of chest pain and arthritis.

The major finding in this study is that a history of frequent and distressing adolescent trauma distinguished between PTSD and nonPTSD groups of older veterans. This finding suggests that there may be developmental and timing aspects to trauma occurrence and subsequent PTSD onset. Specifically, traumagenic events occurring in adolescence may render the individual especially vulnerable to PTSD. This finding generates several hypotheses.

First, since adolescence is a time of identity and self-schema formation, the adolescent may be particularly vulnerable to the "self-shattering and destructuring processes" (Hyer and Associates, 1994) created by trauma. Furthermore, the number and magnitude of transitions that occur during adolescence may be destabilizing; thus, the additional stress created by trauma may overload an already fragile

Table II. Summary of Frequency and Intensity of Lifetime Trauma for Childhood, Adolescence, and Adulthood: Multi- and Univariate Analysis of Variance

Source of variation	Multivariate F-ratio	Univariate F-ratio ^a	p <
Lifetime trauma query	3.0		
Childhood		2.9	0.10
Adolescent		7.8	0.01
Adult		0.0	0.80

^aUnivariate df = 1, 28.

^aUnivariate df = 1,28.

system. Third, networks or associations for memory (Bower, 1981) of trauma may be more developed in adolescence than in childhood; consequently, the recall for adolescent trauma may suggest that while the occurrence of childhood trauma is extremely distressing, the verbal memory of the experience remains less accessible. Fourth, trauma may profoundly impair the future, forward-looking orientation common in adolescence (van der Veer, 1993); consequently, pessimistic assumptions about the future may be incorporated into an emerging world view. Machsound, Dyregrov, and Raundalen (1993) suggest that the adolescent may be more vulnerable than the child to traumatic events because the adolescent is more cognitively aware of the implications of the traumatic event. Implications for Vietnam veterans, whose average age at time of service was 19 years, are noteworthy.

Limitations of our study are as follows: Our sample of 30 individuals may be insufficient to appropriately distinguish differences between groups. Additionally, generalizability of our findings may be limited.

Despite the limitations of our **study**, the following findings are worth noting: (1) **30%** of oui elderly medical help-seeking sample met the CAPS clinical cut-off for a positive diagnosis for PTSD, (2) frequency and intensity of adolescent trauma distinguished between PTSD and **nonPTSD** groups.

This pilot study represents a preliminary step toward investigating dimensions of PTSD among outpatient, medical help-seeking, elderly, male veterans. Previous research with elderly veterans has specifically focused upon combat-related PTSD, rather than upon a range of traumatic events that may occur across the lifespan. Our findings highlight the need for future research in the following areas: (1) prevalence and manifestations of PTSD resulting from a variety of trauma among elderly veterans; (2) somatic manifestations of PTSD among the elderly; (3) developmental timing aspects of trauma occurrence and their contribution to PTSD onset.

ACKNOWLEDGMENTS

Support for this work was provided in part by a grant from the Veterans Affairs Health Services Research and Development Service. Authors wish to thank Peter Berman, PhD and the staff at the Day Hospital of the Palo Alto Veterans Affairs Medical Center for their support in the implementation, and Larry W. Thompson, PhD for his support in the development of this research.

REFERENCES

Aldwin, C. M., Levenson, M. R., and Spiro, A. (1994). Vulnerability and resilience to combat exposure: Can stress have lifelong effects? *Psychol. Aging 9:* 34-44.

American Psychiatric Association (1994). Diagnostic and Statistical Manual of Mental Disorders IV, American Psychiatric Association, Washington, D.C.

Beck, A. T., Rush, A. J., Shaw, B. F., and Emery, G. (1979). Cognitive Therapy of Depression, Guilford Press. New York.

Benedikt, R. A., and Kolb, L. C. (1986). Preliminary findings on chronic pain and posttraumatic stress disorder. Am. J. Psychiat. 143: 908-910.

- Bernstein, E. M., and Putnam, F. W. (1986). Development, reliability, and validity of a dissociation scale. *J. Nerv. Ment. Dis.* 174(12): 727-735.
- Blake, D. D., Keane, T. M., Wine, P. R., Mora, C., Taylor, K. L., and Lyons, J. A. (1990a). Prevalence of PTSD symptoms in combat veterans seeking medical treatment. J. Traum. Stress 3 15-27.
- Blake. D. D., Weathers, F. W., Nagy, L. M., Kaloupek, D. G., Klauminzer, G., Charney, D. S., and Keane, T. M. (1990b). A clinician rating scale for assessing current and lifetime PTSD: The CAPS-1. Behav. Ther. 13: 187-188.
- Blake. D. D., Cook. J. D., and Keane, T. M. (1992). Post-traumatic stress disorder and coping in veterans who are seeking medical treatment. J. Clin. Psychol. 48: 695-704.
- Bower, G. H. (1981). Mood and memory. Am. Psycho!. 36: 129-148.
- Bremner, J. D., Southwick, S. M., Johnson, D. R., Yehuda, R., and Charney, D. S. (1993). Childhood physical abuse and combat-related posttraumatic stress disorder in Vietnam veterans. Am. J. Psychiat. 150: 235-239.
- Butcher, J. N., Dahlstrom, W. G., Graham, J. R., Tellegen, A., and Kaemmer, B. (1989). Manual for the Restandardized Minnesota Multiphasic Personality Inventory: MMPI-2. An Administrative and Interpretive Guide, University of Minnesota Press, Minneapolis.
- Derogatis, L. R. (1977). SCL-90 Administration, Scoring and Procedures Manual 1 for the R(evised) Version. Johns Hopkins University School of Medicine, Baltimore.
- Drescher, K. D., and Abueg, F. R. (1992). Lifetime Trauma Query (LTQ), National Center for Posttraumatic Stress Disorder, Palo Alto, CA.
- Emery, V. O., Emery, P. E., Shama, D. K., Quiana, N. A., and Jassani, A K. (1990). Predisposing variables in PTSD patients. J. Traum. Stress 4: 325-343.
- Folstein, M., Folstein, S., and McHugh, P. (1975). Mini-mental state—A practical method for grading the cognitive state of patients for the clinician. *J. Psychiat. Res.* 12: 189-198.
- Glaubman, H., Mikulincer, M., Porat, A., Wasserman, O., and Birger, M. (1989). Sleep of chronic post-traumatic patients. J. Traum. Stress 2: 255-263.
- Hammarberg, M.(1992). Penn inventory for posttraumatic stress disorder: Psychometric properties. *Psychol. Assess.* 4(1), 67-76.
- Hearst, N., Newman, T. B., and Hulley, S. B. (1986). Delayed effects of the military draft on mortality. New Engl. J. Med. 314: 620-624.
- Hyer, L. and Associates (1994). Trauma Victim: Theoretical Issues and Practical Suggestions, Accelerated Development, Muncie, IN.
- Hyer, L., Woods, M. G., Summers, M. N., Boudewyns, P., and Harrison, W. R. (1990). Alexithymia among Vietnam veterans with posttraumatic stress disorder. I. Clin. Psychiat. 51: 243-247.
- Keane, T. M., Mailoy, P. F., and Fairbank, J. A (1984). Empirical development of an MMPI subscale for the assessment of combat-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 52, 888-891.
- Keane, T. M., Caddell, J. M., and Taylor, K. L. (1988). Mississippi scale for combat related post-traumatic stress disorder: Three studies in reliability and validity. J. Consult. Clin. Psychol. 56: 85-90.
- Keltikangas-Jarvinen, L. (1987). Concept of alexithymia: II. The consistency of alexithymia. Psychother. Psychosomat. 47: 113-120.
- Kluznik, J. C., Speed, N., van Valkenburg, C., and Magraw, R. (1986). Forty-year follow-up of United States prisoners of war. Am. J. Psychiat. 143(11): 1443-1446.
- Kosten, T. R., Krystal, J. H., Giller, E. L., Frank, J., and Van, E. (1992). Alexithymia as a predictor of treatment response in post-traumatic stress disorder. J. Traum. Stress 5: 563-573.
- Kulka, R. A., Schlenger, W. E., Fairbank, J. A., Hough, R. L., Jordan, B. K., Marmar, C. R., and Weiss, D. S. (1990). Trauma and the Vietnam War Generation: Report of Findings from the National Vietnam Veterans Readjustment Study, Brunner/Mazel, New York.
- Lesser, I. M. (1981). A review of the alexithymia concept. Psychosomat. Med. 43: 531-543.
- Lipton, M. I., and Schaffer, W. R. (1988). Physical symptoms related to post-traumatic stress disorder (PTSD) in an aging population. *Military Med.* 153: 316-318.
- Litz, B. T., Keane, T. M., Fisher, L., Man, B., and Monaco, V. (1992). Physical health complaints in combat-related post-traumatic stress disorder: A preliminary report. J. Tram Stress 5 131-141.
- Machsound, M. S., Dyregrov, A., and Raundalen, M. (1993). Traumatic war experiences and their effects on children. In Wilson, J. P., and Raphael, B. (eds.), *International Handbook of Traumatic Stress Syndromes*, Plenum Press, New York.
- iii r, D. J., Goreczny, A. I., and Perconte, S. T. (1992). C ari of sym n distres between W Var II ex-POWs and Vietnam combat veterans with post-traumatic stress disorder J. Anxiety Dis. 6 41-46.
- Moos, R (1975). Family Environment Scale, Consulting Psychologists Press, Palo Alto, CA.

- Nichols, B. L., and Czirr, R. (1986). Post-traumatic stress disorder: Hidden syndrome in elders. In Brink, T. L. (ed.), Clinical Gerontology: A Guide to Assessment and Intervention, The Haworth Press, New York, pp. 417-433.
- Op den Velde, W., Falger, P. R., Hovens, J. E., de Groen, J. H. M., Lasschuit, L. J., van Duijn, H., and Schouten, E. G. W. (1993). Posttraumatic stress disorder in Dutch Resistance veterans from World War II. In Wilson, J. P., and Raphael, B. (eds.), International Handbook of Traumatic Stress Syndromes, Plenum Press, New York.
- Pasini, A, della Chiaie, R., Seripa, S., and Ceani, N. (1992). Alexithymia as related to sex, age, and educational level; Results of the Toronto Alexithymia Scale in 417 normal subjects. Comprehen. Psychiat. 33(1): 42-46.
- Ruegg, R. G., Zisook, S., and Swerdlow, N. R. (1988). Depression in the aged: An overview. Psychiat. Clin. North Am. 11: 83-99.
- Schlenger, W., and Kulka, R. A. (1989). PTSD Scale Development for the MMPI-2, Research Triangle Institute, Research Triangle Park, NC.
- Shalev, A., Bleich, A., and Ursano, R. J. (1990). Posttraumatic stress disorder: Somatic comorbidity and effort tolerance. *Psychosomatic: 31*(2): 197-203.
- Shapiro, S., Skinner, E. A., Kessler, L. G., Von Korff, M., German, P. S., Tischler, G. L., Leaf, P. J., Benham, L., Cottler, L., and Regier, D. A. (1984). Utilization of health and mental health services. Arch. Gen. Psychiat. 41: 971-978.
- Spiro, A., Schnurr, P., and Aldwin, C. (1994). Combat-related posttraumatic stress disorder symptoms in older men. *Psychol. Aging* 9(1): 17-26.
- Sutker, P. B., Winstead, D. K., Galina, Z. H., and Allain, A. N. (1991). Cognitive deficits and psychopathology among former prisoners of war and combat veterans of the Korean conflict. *Am. J. Psychiat.* 148: 67-72.
- Taylor, G. J., Ryan, D. P., and Bagby, R. M. (1985). Toward the development of a new self-report alexithymia scale. *Psychother, Psychosomat.* 44: 191-195.
- Weathers, F. W., and Litz, B. T. (1994). Psychometric properties of the Clinician-Administered PTSD Scale, CAPS-1. PTSD Res. Quart. 5(2): 2-6.
- Weiss, D. S., Marmar, C. R., Schlenger, W. E., Fairbank, J. A., Jordan, B. K., Hough, R. L., and Kulka, R. A. (1992). The prevalence of lifetime and partial post-traumatic stress disorder in Vietnam theater veterans. *J. Traum. Stress* 5: 365-376.
- White, P., and Faustman, W. O. (1989). Coexisting physical conditions among inpatients with post-traumatic stress disorder. *Military Med. 154*(2): 66-71.
- Zaidi, L. Y., and Foy, D. W. (1994). Childhood abuse experiences and combat-related PTSD. J. Traum. Stress 7(1): 33-42,